# **BookletChart**

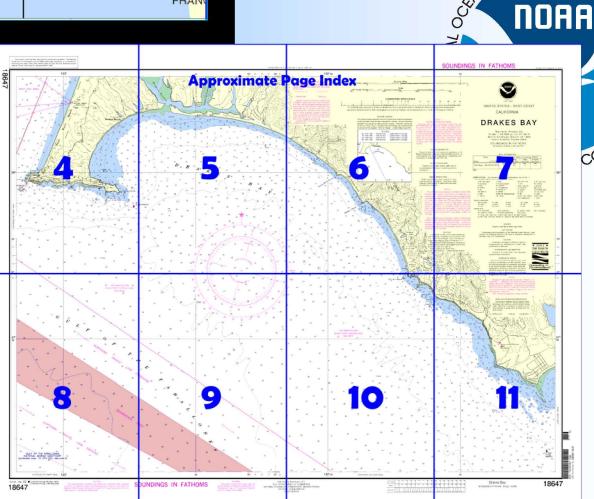
**Drakes Bay** 

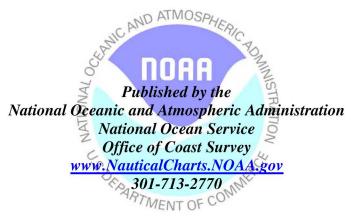
(NOAA Chart 18647)



A reduced scale NOAA nautical chart for small boaters. When possible, use the full size NOAA chart for navigation.

- ☑ Complete, reduced scale nautical chart
- ✓ Print at home for free
- ☑ Convenient size
- ☑ Up to date with all Notices to Mariners
- ☑ United States Coast Pilot excerpts
- Compiled by NOAA, the nation's chartmaker.





# What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

# What is a BookletChart $\stackrel{\text{\tiny TM}}{=}$ ?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <a href="http://www.NauticalCharts.NOAA.gov">http://www.NauticalCharts.NOAA.gov</a>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

# **Notice to Mariners Correction Status**

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.



[Coast Pilot 7, Chapter 7 excerpts] (67) Point Reyes, 18 miles N of Farallon Light, is a bold, dark, rocky headland 612 feet high at the W and higher extremity of a ridge running in an E direction for 3 miles. It is an excellent radar target in thick weather. There is lowland N of the point, so that from N and S, and from seaward in hazy weather, it usually appears as an island. The point is visible for over 25 miles.

(68) **Point Reyes Light** (37°59.7'N., 123°01.4'W.), 265 feet above the water, is

shown from a platform on top of a square building on the W extremity of the point. A fog signal is at the light. Two rocks, 275 yards W of the light, are covered about 3 feet and break in a moderate swell.

(69) The **Gulf of the Farallones National Marine Sanctuary** has been established to protect and preserve the marine birds and mammals, their

habitats, and other natural resources in the waters surrounding the Farallon Islands and Point Reyes, and to ensure the continued availability of the area as a research and recreational resource. The sanctuary encompasses the waters off Bodega Head and Point Reyes, and the waters surrounding Farallon Islands. The sanctuary includes Bodega Bay but not Bodega Harbor. Recreational use of the area is encouraged. (See 15 CFR 922, chapter 2, for limits and regulations.)

- (70) **Drakes Bay,** named after English explorer Sir Francis Drake, who anchored here in 1579, is NE of the 1-mile-long 200-foot-high, narrow peninsula that forms the easternmost part of Point Reyes. White cliffs commence at the SW angle of the bay and curve round to the NE for about 6 miles, ending at high white sand dunes. This curving shoreline forms Drakes Bay, which affords good anchorage in depths of 4 to 6 fathoms, sandy bottom, in heavy NW weather. Several lagoons back of the N shore empty into the bay through a common channel which is navigable by shallow-draft vessels with local knowledge.
- (71) **Chimney Rock** lies close under the outer end of the Drakes Bay peninsula. The area between Chimney Rock and the 5-fathom curve, 0.4 mile E and SE, breaks in moderate weather. A lighted whistle buoy is moored 0.6 mile SE of the rock.
- (72) Drakes Bay is used extensively in heavy NW weather and many fishing vessels operate from here during the season. A fish wharf is about midway along the inner side of the peninsula. A visible wreck is about 100 feet E of the fish wharf in about 37°59'41"N., 122°58'19"W. Visible and submerged piles W of the fish wharf are a hazard.
- (73) From the sand dunes near the E part of Drakes Bay, cliffs 100 to 200 feet high extend 5 miles SE to **Double Point**, which has two high spurs, 0.4 mile apart, projecting 200 to 300 yards from the general coastline. A small 47-foot-high island is 300 yards off the NW spur, and a 54-foot-high rock is close under the longer and lower SE spur. From Double Point to Bolinas Point, about 3.5 miles SE, the coast is bold with high cliffs behind narrow sand beaches.
- (74) **Bolinas Point,** 15.3 miles SE of Point Reyes Light, is 160 feet high and the W extremity of the comparatively level tableland extending E to Bolinas Lagoon. An aerolight and numerous radio towers are 0.6 mile N of the point.
- (75) **Duxbury Point,** 16.5 miles SE of Point Reyes Light, is 160 feet high and yellow in color. The point is the S edge of the tableland W of Bolinas Lagoon.
- (76) **Duxbury Reef**, extending 1.2 miles SE of Duxbury Point, is long, narrow, and partly bare at low water. A ledge covered 30 to 36 feet extends from the reef to about 1.4 miles S of the point; a lighted whistle buoy is about 2 miles S of the point. Great care must be exercised in passing this area.
- (77) **Warning.**—It was reported that in heavy weather strong N currents resulting from prolonged S winds may exist in the area from Duxbury Reef to Golden Gate.

# Corrected through NM Mar. 28/09 Corrected through LNM Mar. 24/09

## HEIGHTS

Heights in feet above Mean High Water.

### SUPPLEMENTAL INFORMATION Consult U.S. Coast Pilot 7 for important

supplemental information.

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

# CAUTION SUBMARINE PIPELINES AND CABLES Charted submering starts.

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

Pipeline Area Cable Area

Additional uncharted submarine pipelines and Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or mulichted burous

## CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

#### HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which is Norm American Datum or 1982 (INAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.265' southward and 3.977' westward to agree with this chart.

## CAUTION

Limitations on the use of radio signals as

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.
Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.
Station positions are shown thus:

⊙(Accurate location) o(Approximate location)

# NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Mt. Pise, CA KHB-49 162.40 MHz WX2

## AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

# RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

Mercator Projection Scale 1:40,000 at Lat 37°58'N North American Datum of 1983 (World Geodetic System 1984)

SOUNDINGS IN FATHOMS AT MEAN LOWER LOW WATER

## NOTE B

NOTE B
The U.S. Coast Guard operates a mandatory Vessel Traffic Services (VTS) system in the San Francisco Bay and surrounding areas. Vessel operating procedures and designated radiotelephone frequencies are published in 33 CFR 161, the U.S. Coast Pilot, and/or the VTS User's Manual. Mariners should consult these sources for applicable rules and reporting requirements. Although mandatory VTS participation is limited to the navigable waters of the United States, certain vessels are encouraged or may be required, as a condition of port entry, to report beyond this area to facilitate advance vessel traffic management within the VTS area.

The U.S. Coast Guard operates a Vessel Traffic Service Offshore Vessel Movement Reporting System covering the seaward approaches to San Francisco Bay. Vessels are requested to monitor VTSSF on Channel 12 at 15 and 45 minutes past each hour for broadcast reports of known shipping traffic in the area.

# **Table of Selected Chart Notes**

NOTE A

Navigation regulations are published in Chapter 2, U.S.
Coast Pilot 7. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the
regulations may be obtained at the Office of the Commander,
11th Coast Guard District in Alameda, California or at the
Office of the District Engineer, Corps of Engineers in
San Francisco, California.

Refer to charted regulation section numbers.

#### POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

Additional information can be obtained at nauticalcharts.noaa.gov.

#### AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Department of the Navy, and U.S. Coast Guard.

#### SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

#### CAUTION

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LMM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at

#### NOTE X

NOTE X

Within the 12-nautical mile Territorial Sea, established by Presidential Proclamation, some Federal laws apply. The Three Nautical Mile Line, previously identified as the outer limit of the territorial sea, is retained as it continues to depict the jurisdictional limit of the other laws. The 9-nautical mile Natural Resource Boundary off the Guif coast of Florida, Texas, and Puerto Rico, and the Three Nautical Mile Line elsewhere remain in most cases the inner limit of Federal fisheries jurisdiction and the outer limit of the jurisdiction of the states. The 24-nautical mile Contiguous Zone and the 200-nautical mile Exclusive Economic Zone were established by Presidential Proclamation. Unless fixed by treaty or the U.S. Supreme Court, these maritime limits are subject to modification. to modification.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

# TIDAL INFORMATION

Height referred to datum of soundings (MLLW)					
Mean Higher Mean Mean High Water High Water Low Water					
feet feet feet feet feet 1.2					
3					

lide predictions, and tidal current predictions are available on the Internet from http://tidesandcurrents.noaa.gov. (Mar 2009)

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)

Aids to Navigation (lights a	are white unless ot	herwise indicated):			
AERO aeronautical	eronautical G green		Mo morse code	R TR radio tower	
Al alternating	IQ interrupted quick		N nun	Rot rotating	
B black	Iso isophase		OBSC obscured	s seconds	
Bn beacon	LT HO lighthouse		Oc occulting	SEC sector	
C can	M nautical mile		Or orange	St M statute miles	
DIA diaphone	m minutes		Q quick	VQ very quick	
F fixed	MICRO TR microwave tower		R red	W white	
FI flashing	FI flashing Mkr marker		Ra Ref radar reflector	WHIS whistle	
			R Bn radiobeacon	Y yellow	
Bottom characteristics:					
Blds boulders	Co coral	gy gray	Ovs ovsters	so soft	
bk broken	G gravel	h hard	Rk rock	Sh shells	
Cy clay	Grs grass	M mud	S sand	sy sticky	
Miscellaneous:					
AUTH authorized	Obstn	obstruction	PD position doubtful	Subm submerged	
ED existence doubtful PA		sition approximate	Rep reported		
21, Wreck, rock, obstruction, or shoal swept clear to the depth indicated.					
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.					
-					

# PRINT-ON-DEMAND CHARTS

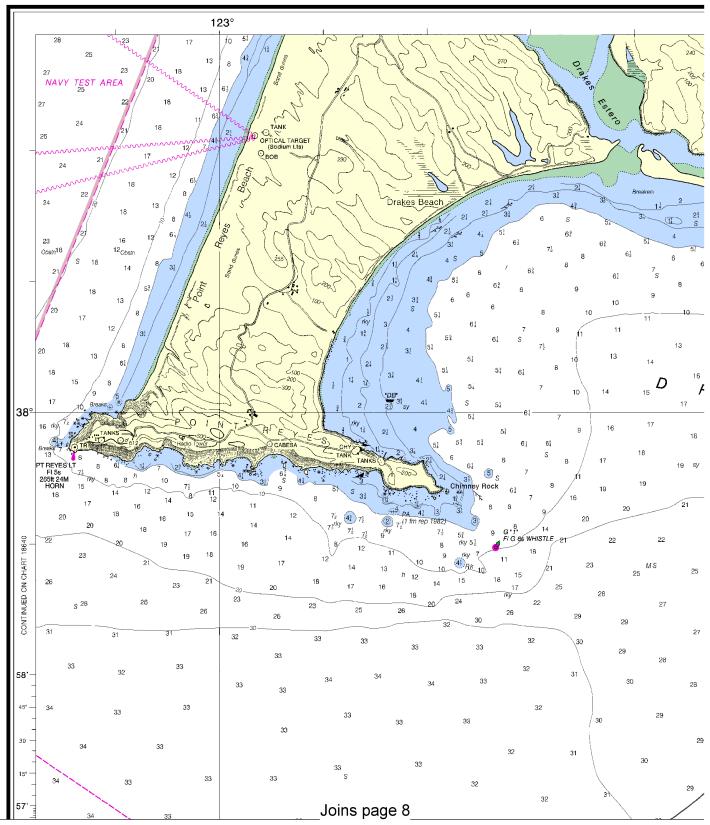
NOAA and its partner, OceanGraftx, offer this chart updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts or contact NOAA at 1-800-584-488, http://NoatuciaCharts.gov, help@NauticalCharts.gov, or OceanGrafix at 1-877-56CHART, http://OceanGrafix.com, or between Charts or Charts of the C

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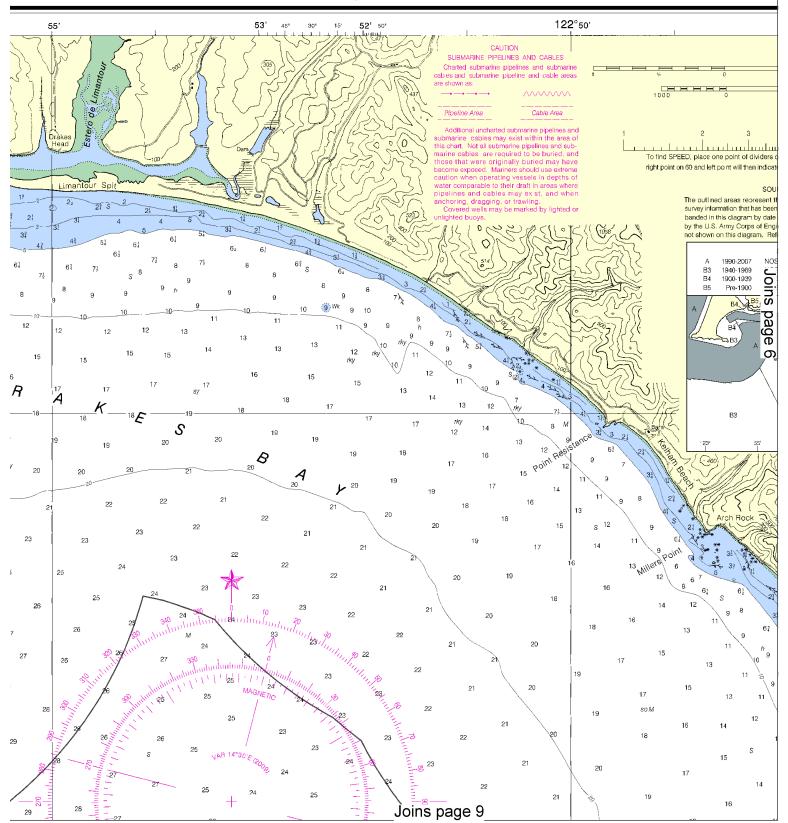






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Formerly C&GS 5599, 1st Ed., June 1892 C-1897-21 KAPP 1821

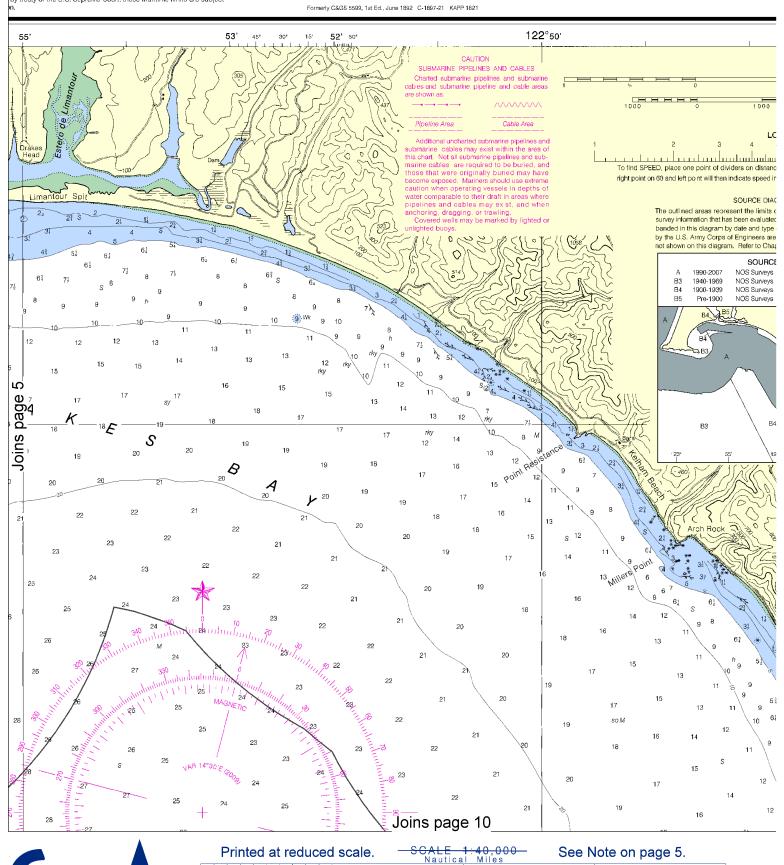


This BookletChart was reduced to 75% of the original chart scale. The new scale is 1:53333. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.



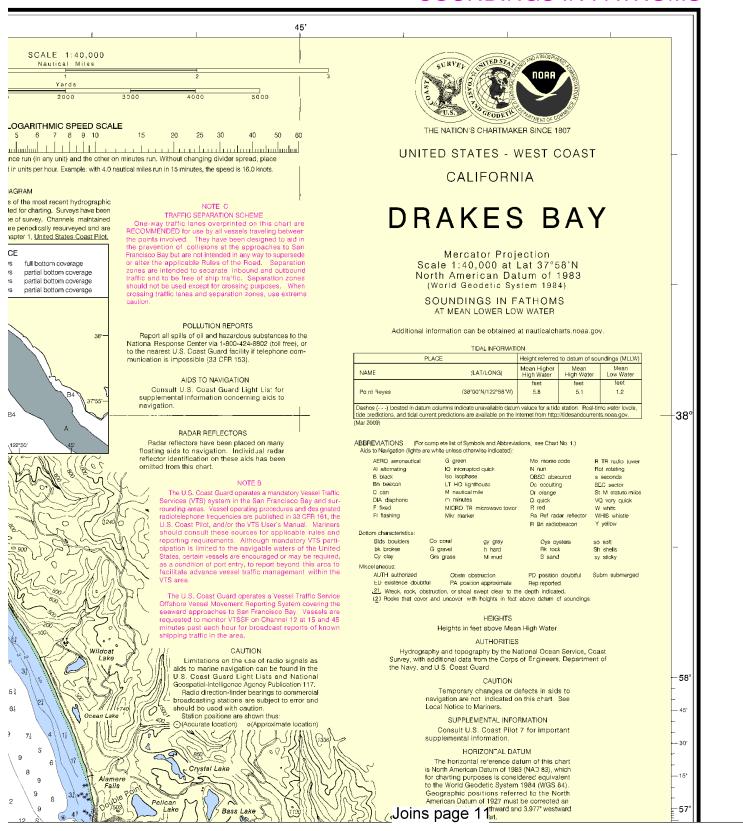
NOTE X

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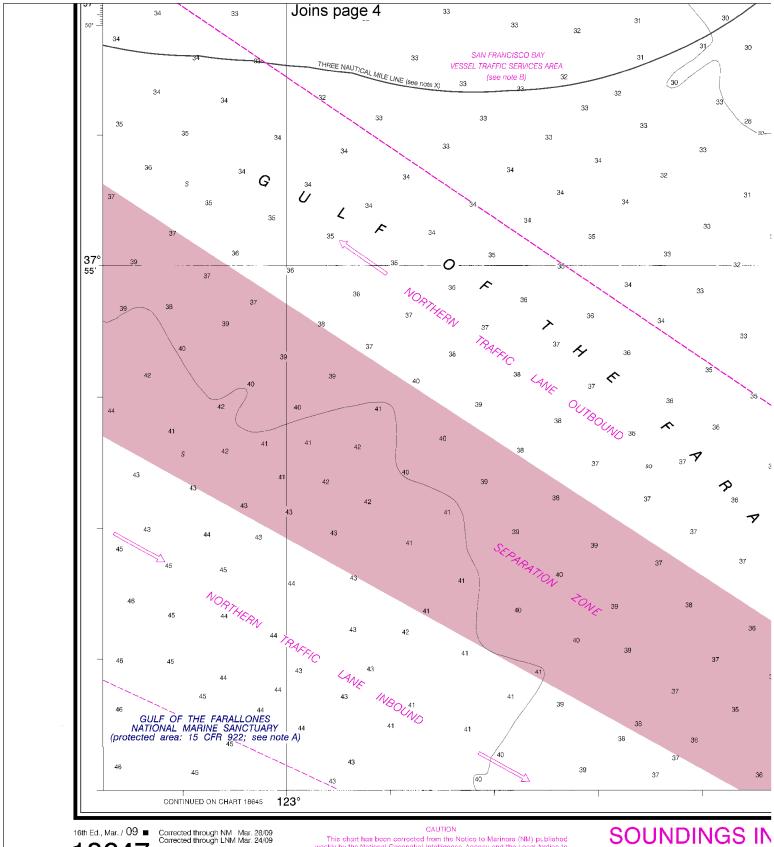


# **SOUNDINGS IN FATHOMS**



This BookletChart has been updated with: Coast Guard Local Notice To Mariners: 0510 2/2/2010, NGA Weekly Notice to Mariners: 0910 2/27/2010,

Canadian Coast Guard Notice to Mariners: n/a .

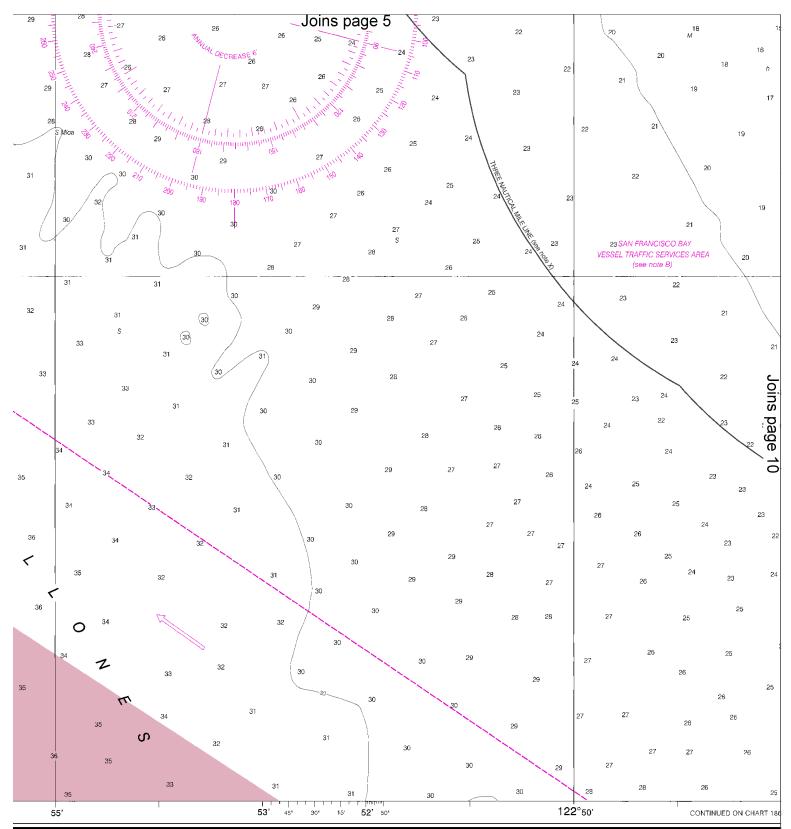


16th Ed., Mar. / 09 **1 18647** 

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts nosa gov







**V FATHOMS** 

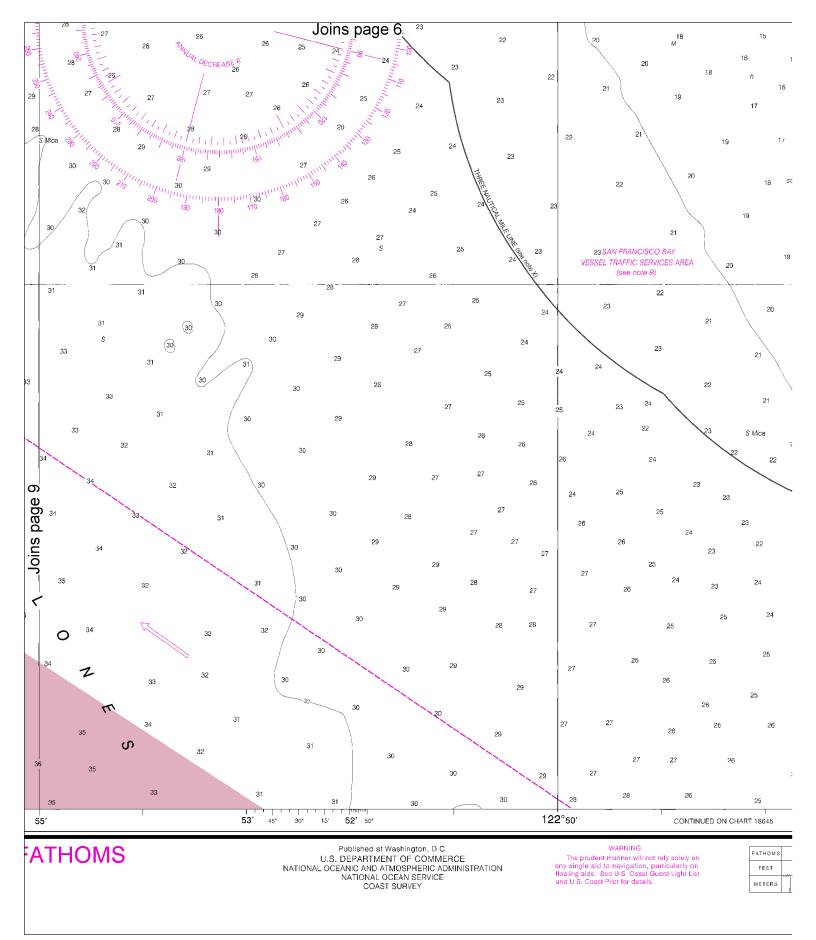
Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. Soc U.S. Coast Guard Light List and U.S. Coast Pilot for details.

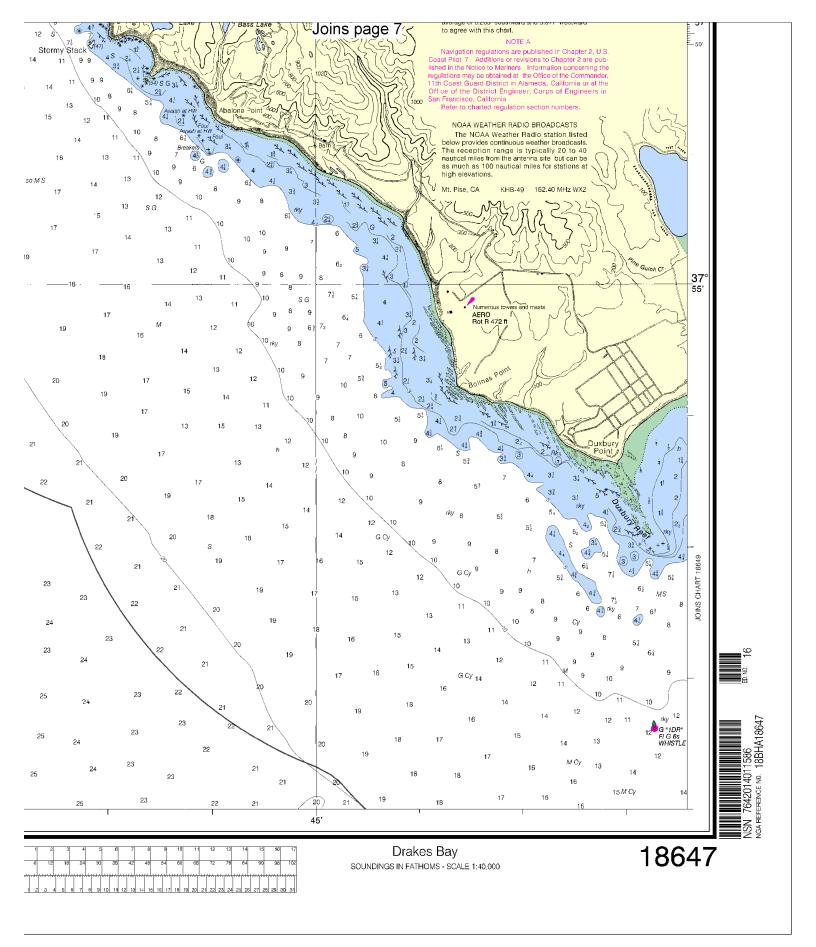
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# **EMERGENCY INFORMATION**

# VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

**Channel 9** – Communications between boats and ship-to-coast.

**Channel 13** – Navigation purposes at bridges, locks, and harbors.

# Channel 16 – Emergency, distress and safety calls

to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.

**Channel 22A** – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 & 78A – Recreational boat channels.

# **Distress Call Procedures**

- 1. Make sure radio is on.
- 2. Select Channel 16.
- 3. Press/Hold the transmit button.
- 4. Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- 6. Release transmit button.
- Wait for 10 seconds If no response Repeat MAYDAY Call.

# HAVE ALL PERSONS PUT ON LIFE JACKETS!!

**Mobile Phones** – Call 911 for water rescue.

Coast Guard Search & Rescue – 510-437-3700 Coast Guard San Francisco – 415-399-3479 Commercial Vessel Assistance – 1-800-367-8222

<u>NOAA Weather Radio</u> – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

<u>Getting and Giving Help</u> – Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.



# NOAA CHARTING PUBLICATIONS

Official NOAA Nautical Charts – NOAA surveys and charts the national and territorial waters of the U.S, including the Great Lakes. We produce over 1,000 traditional nautical charts covering 3.4 million square nautical miles. Carriage of official NOAA charts is mandatory on the commercial ships that carry our commerce. They are used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters. NOAA charts are available from official chart agents listed at: <a href="https://www.NauticalCharts.NOAA.gov">www.NauticalCharts.NOAA.gov</a>.

Official Print-on-Demand Nautical Charts — These full-scale NOAA charts are updated weekly by NOAA for all Notice to Mariner corrections. They have additional information added in the margin to supplement the chart. Print-on-Demand charts meet all federal chart carriage regulations for charts and updating. Produced under a public/private partnership between NOAA and OceanGrafix, LLC, suppliers of these premium charts are listed at www.OceanGrafix.com.

# Official Electronic Navigational Charts (NOAA ENCs®) –

ENCs are digital files of each chart's features and their attributes for use in computer-based navigation systems. ENCs comply with standards of the International Hydrographic Organization. ENCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

# Official Raster Navigational Charts (NOAA RNCs<sup>™</sup>) –

RNCs are geo-referenced digital pictures of NOAA's charts that are suitable for use in computer-based navigation systems. RNCs comply with standards of the International Hydrographic Organization. RNCs and their updates are available for free from NOAA at <a href="https://www.NauticalCharts.NOAA.gov">www.NauticalCharts.NOAA.gov</a>.

Official BookletCharts<sup>™</sup> – BookletCharts<sup>™</sup> are reduced scale NOAA charts organized in page-sized pieces. The "Home Edition" can be downloaded from NOAA for free and printed. The Internet address is <a href="https://www.NauticalCharts.gov/bookletcharts">www.NauticalCharts.gov/bookletcharts</a>.

Official PocketCharts<sup>TM</sup> – PocketCharts<sup>TM</sup> are for beginning recreational boaters to use for planning and locating, but not for real navigation. Measuring a convenient 13" by 19", they have a 1/3 scale chart on one side, and safety, boating, and educational information on the reverse. They can be purchased at retail outlets and on the Internet.

Official U.S. Coast Pilot® – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from NOAA chart agents or may be downloaded for free at <a href="https://www.NauticalCharts.NOAA.gov">www.NauticalCharts.NOAA.gov</a>.

Official On-Line Chart Viewer – All NOAA nautical charts are viewable here on-line using any Internet browser. Each chart is up-to-date with the most recent Notices to Mariners. Use these on-line charts as a ready reference or planning tool. The Internet address is www.NauticalCharts.gov/viewer.

Official Nautical Chart Catalogs – Large format, regional catalogs are available for free from official chart agents. Page size, state catalogs are posted on the Internet and can be printed at home for free. Go to <a href="http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm">http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm</a>.

Internet Sites: <a href="https://www.Noa.gov">www.Noa.gov</a>, <a href="